

REMARKS/ARGUMENTS:

Initially, it is Applicant's understanding that with the filing of the above-identified RCE, the Amendment dated 05/23/03, previously filed in response to the Official Action of dated 04/09/03, will be automatically entered prior to the entry of the current Amendment. In accord with such understanding the current Amendment to claim 13 has been reflected in the **LISTING OF CLAIMS** as being a second amendment to claim 13.

STATUS OF THE APPLICATION

The prosecution record prior to the filing of this RCE is that claims 1-12 are allowed; dependent claim 20 is objected to as not dependant upon an allowed claim; independent claim 13 has been rejected under 35 USC 103 over Bunyan et al in view of Applicant's admitted prior art; and, dependent claims 12-19 and 21-26 are rejected under 35 USC 103 over Bunyan et al in view of Applicant's admitted prior art.

PRELIMINARY DISCUSSION OF CLAIM 1

For the record, though claims 1 -12 were indicated as allowed by the Examiner in the Official Action of 04/09/03, the Examiner indicated that claim 1 should be clarified by changing the term "positive plate" in line 9 of claim 1 to "said positive plates". It is pointed out that "plates" in the plural used in claim 1 refers to three types of plates in the stacked arrangement, while "positive plate" refers to a particular plate in the stacked

arrangement.

AMENDED CLAIM 13

Claim 13 has been newly amended to more clearly recite the claimed improved device of the invention. The amendment finds basis throughout the specification and claims as originally filed, particularly at pages 11, 13, 18 and 19 of the specification. It is believed that the amendment to claim 13 places it into condition for allowance and accordingly that each of dependent claims 12-26 would be allowable in view thereof.

Initially, it is pointed out that the term "suspension", as used throughout the specification and claims, is within a common understanding that solid metal particles are dispersed through a liquid and/or solid polymeric medium but not dissolved in it.

It has been brought to Applicant's attention that it is technically accurate to refer to solid metal particles dispersed in a fluid polymeric composition prior to "curing" as being a "suspension". Depending upon the manner and type of curing of a polymeric composition the composition may be considered a solid, whereupon the technically accurate terminology would be that the metal particles are in a "dispersion". Applicant requests comment by the USPTO in regard to this use of terms, particularly confirmation that the USPTO regards the term "suspension" as used in this instance to be inclusive of both the fluid and cured states of a polymeric composition.

THE REJECTION OF DEVICE CLAIMS 13-19 and 21-26 UNDER 35 USC 103

Applicant's acknowledges that stacked plate (e.g. "patch") antennae are known in the prior art.

Applicant points out that the known utility of patch antennae is to receive electromagnetic radio signals, and that shielding a patch antenna from the reception of electromagnetic radio signals is anathema to its known utility.

Claim 13 has been amended to clearly recite that the antenna device of the claimed invention is an electromagnetic energy receiving antenna and that the polymeric composition engaging the antenna device comprises a random dissociated suspension of metal particles.

BUNYAN ET AL discloses shielding of devices from electromagnetic radio signals, by means wherein metal plates are arranged to surround a device, ... "to confine the EMI energy within a source device, and to insulate that device ... from other source devices" (column 1, lines 32-38).

BUNYAN ET AL describes a gasket for use when two or more metal plates are connected in a shielding arrangement, the gasket being of multi-layer construction comprising a porous fabric member with ... "an electrically conductive first side ... being constructed of electrically conductive wire, monofilament, yams or other fibers or, alternatively, by reason of a treatment such as by plating or sputtering being applied to non-conductive fibers to provide a conductive layer thereon" (column 5, lines 36-48). The construction of the gasket is said to provide a continuous, electrically conductive, metal layer through which EMI energy cannot penetrate

to, or from, the shielded device. In short, Bunyan et al teaches using a continuous layer of electrically conductive fabric engaging surrounding metal plates as a barrier which blocks EMI energy from engaging a device.

In contrast, Applicant uses a random dissociated suspension of conductive metal particles in a polymeric composition to enhance the collection of EMI energy by an antenna device. Though the mechanism by which such arrangement works is unknown, it is believed EMI energy signals which do not engage metal particles pass directly through the polymeric composition to the antenna, while other EMI energy signals which engage metal particles as they pass through the polymeric composition are randomly reflected toward the antenna. The functional utility of the Bunyan et al disclosure to shield a device from receipt of electromagnetic signals thus appears to be in direct logical conflict with the functional utility of the present claimed invention.

The USPTO has asserted that Bunyan et al provides motivation to one of ordinary skill in the art to use its gasket in association with any device, including an antenna. Such assertion is without basis and clearly contrary to logic. The logical interpretation of Bunyan et al is that surrounding a patch antenna with a metal shield (with or without a metal coated gasket) would render a patch antenna non-functional. Indeed, this is one of the problems discussed in the Background of the Invention and the primary reason for the inefficiency in mounting patch antennae on the underside of vehicles and the general practice of mounting same

in positions which are in direct line-of-sight with GPS satellites and places which are not covered by shielding metal structure.

If the USPTO is going to attribute any motivation to one of ordinary skill in the art from the disclosure of Bunyan et al, the USPTO must recognize that the overwhelming import of the disclosure of Bunyan is that a conductive metal shields the passage of electromagnetic signals. It takes a leap in logic for one of ordinary skill in the art to even contemplate any use for Bunyan's conductive shielding of EMI energy in association with an antenna whose functional purpose is to transmit and/or receive electromagnetic signals, much more to contemplate a motivation which suggests its use can enhance the receipt and/or transmittal of electromagnetic signals.

It is submitted, the obvious conclusion imparted to one of ordinary skill by Bunyan et al is there is no functional utility in regard to antennae, and that any connection that is being made by the USPTO to the present invention emanates from the disclosure of the present application rather than the disclosure of Bunyan et al.

Claim 13 has been amended to adopt details presented at page 4, numbered paragraph 3 of the Official Action and to clarify the recitation noted by the USPTO at page 5, numbered paragraph 5 of the Official Action. Claims 14-26, are directly or indirectly dependent upon claim 13, and appear allowable in view of the amendments to claim 13.

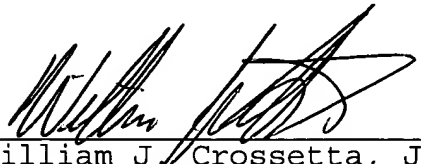
In view of the foregoing, it is submitted the cited Bunyan et al reference does not obviate the invention of claims 13-26 and

accordingly, that claims 1-26 are patentable under any combination of the cited references.

Respectfully submitted,

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